

September 8, 2014

**1st
2nd**

Starter

Clear off your desk and get out a sharpened pencil to be ready for quiz 1.2 (adding integers)



Challenge Accepted

9/4 - Subtracting Integers using Counters and Number lines

Integer Counters

1 ACTIVITY: Subtracting Integers

Work with a partner. Draw a picture to show how you use integer counters to find $4 - 2$.

$$= 2$$

 = one positive

 = one negative



2 ACTIVITY: Adding Integers

Work with a partner. Draw a picture to show how you use integer counters to find $4 + (-2)$.

$$= 2$$

 = one positive

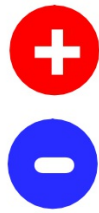
 = one negative



In your notes, write a couple sentences explaining how $4 + (-2)$ and $4 - 2$ are connected.

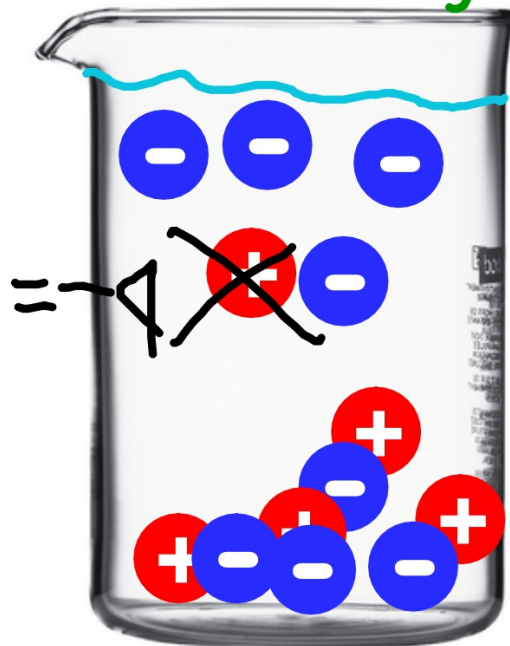
Adding a -2 is like subtracting 2.
They both take away 2 from 4.
"cancel"

$$-3 + (-1)$$

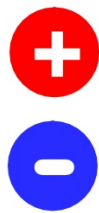


$$-3 - 1$$

take away positive

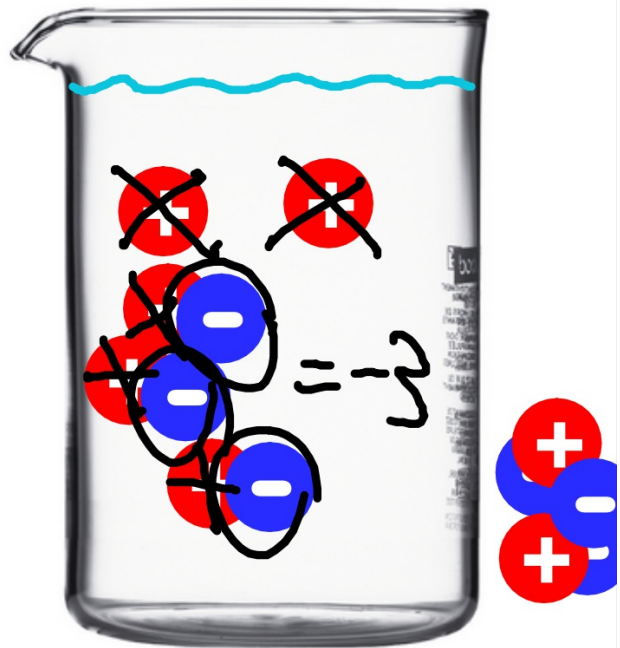


$$2 + (-5) = -3$$

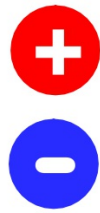


$$2 - 5$$

take away



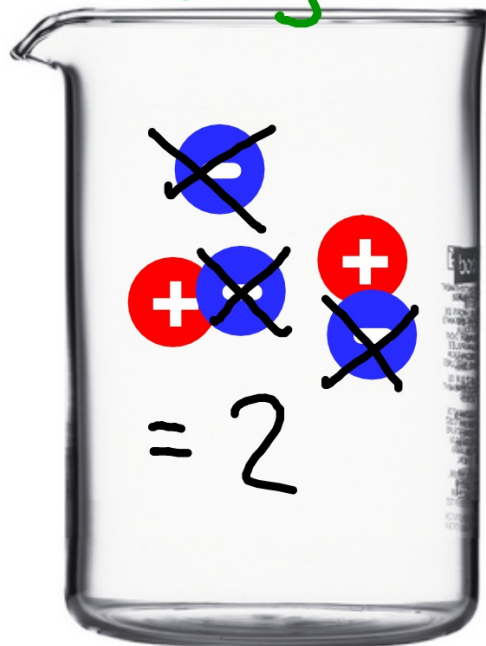
$$-1 + 3$$



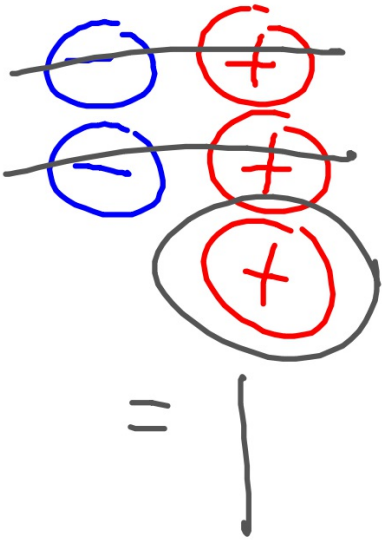
$$-1 - (-3)$$

Take
away

Negative

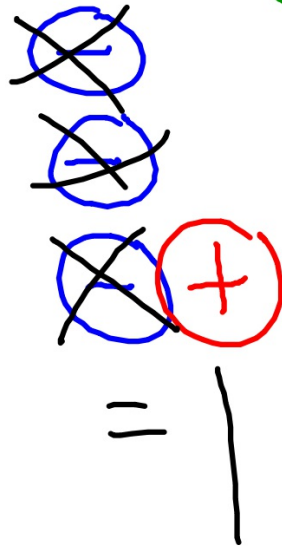


$$-2 + 3$$



$$-2 - (-3)$$

take away

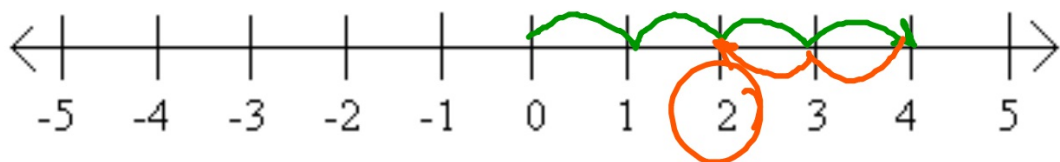


Number lines:

A “-” sign reverses

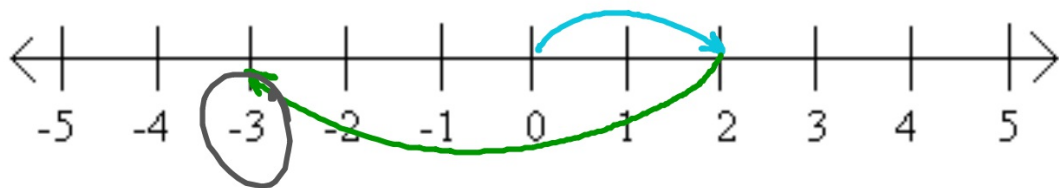
Right
Reverse
4 + (-2)

Left
4 - 2

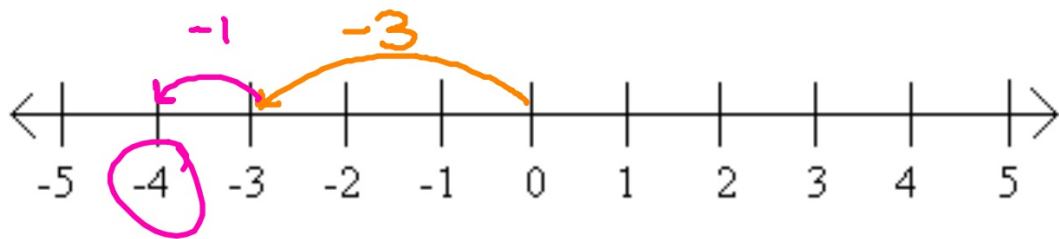


$$2 - 5 = -3$$

↑
left

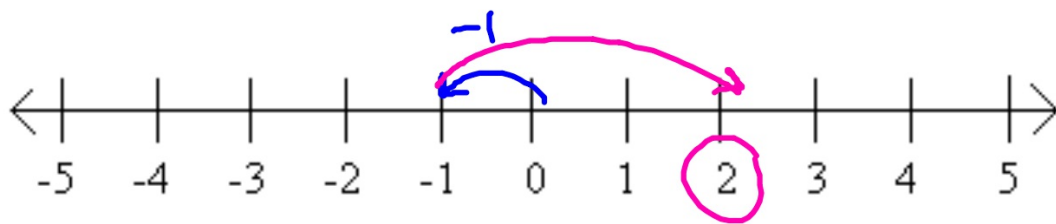


$$-3 - 1 = -4$$

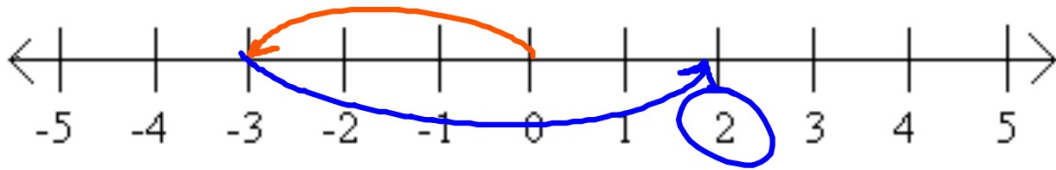


$$-1 - (-3) = 2$$

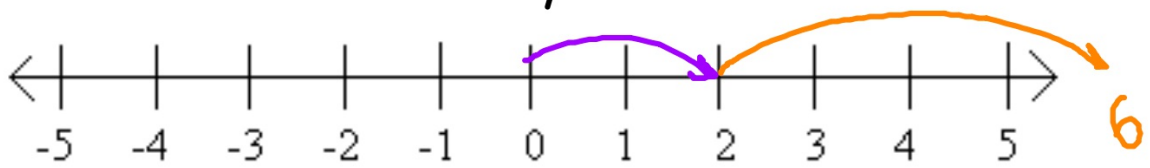
Annotations: "left" with a green arrow pointing to the minus sign, and "Reverse" with a pink arrow pointing to the minus sign inside the parentheses.



$$-3 \overset{\text{left}}{-} \overset{\text{reverse}}{(-5)} = 2$$



$$2 \overset{\text{left}}{+} \overset{\text{reverse}}{(-4)} = 6$$



Homework

Blue WS4

Due Wednesday

21. $-1 - (-3)$ } counters

22. $5 - (-1)$

23. $-3 - 2$ } numberlines

24. $1 - (-3)$